

REMARKS

In reply to the Office action of October 13, 2005, Applicant requests that all claims be allowed in view of the following remarks. Claims 1-6, 8-16, 18-26 and 28-33 are pending, with claims 1, 11 and 21 being independent. Claims 1, 11 and 21 are amended, claims 31-33 are newly added and claims 7, 17 and 27 are cancelled. No new matter has been added.

Claims 1-3, 5-6, 8-13, 15-16, 18-23, 25-26 and 28-30

Claims 1-3, 5-6, 8-13, 15-16, 18-23, 25-26 and 28-30 are rejected under 35 U.S.C. §102(a) as being anticipated by Hodson ("Skew Detection and Compensation for Internet Audio Applications"). Applicant requests withdrawal of the rejection of claims 1-3, 5-6, 8-13, 15-16, 18-23, 25-26 and 28-30 because Hodson does not describe or suggest the subject matter of the independent claims. For example, Hodson does not describe or suggest determining a range for a size of the communication delay based on a measured communication delay that arises from a receiving data buffer (emphasis added).

As amended, claim 1 recites a method for dynamic latency management in a real-time electronic communication. The method includes measuring a communication delay arising from a receiving data buffer. The method also includes determining a latency adjustment necessary to adjust the size of the communication delay to within a predetermined range and determining a range for a size of the communication delay based on the measured communication delay. A number of samples of a playback data block passing through the receiving data buffer are modified based on the latency adjustment determined to be necessary to adjust the size of the communication delay and on the range determined for the size of the communication delay. Modifying the number of samples includes performing heuristic resampling of a playback block.

In general, Hodson describes detection of, and compensation for, audible interruptions in audio streams due to unsynchronized clocks between a source and a receiving application. See Hodson at abstract. Samples are inserted into, or deleted from, the receiver's playback buffer to compensate for the audible interruptions that would otherwise be present. See Hodson at §§ 2

and 3. The number of samples to insert or delete is determined based on a skew detection algorithm. See Hodson at § 1.

More particularly, Hodson detects, and compensates for, clock skew by attempting to maintain the playback buffer occupancy within a constrained region. See Hodson at § 2. Hodson also describes low and high water marks (δ_L and δ_H , respectively) that define the lower and upper bounds of the constrained region. See Hodson at § 2. Accordingly, the low and high water marks of Hodson define a range of samples within which Hodson attempts to maintain the playback buffer occupancy.

However, Hodson fails to describe the basis for determining the low and high water marks, and thus the bounds for the range. Furthermore, Hodson does not describe any correlation between either of the low or high water marks (e.g., the lower and upper bounds of the range) and a measured communication delay arising from the receiver's playback buffer. Thus, the system of Hodson necessarily fails to determine a range for a size of a communication delay based on a measured communication delay that arises from a receiving data buffer, as recited in independent claim 1.

For at least these reasons, Applicant respectfully requests withdrawal of the rejection of independent claim 1, along with claims 2-3, 5-6 and 8-10 that depend therefrom.

Independent claim 11 recites a computer program, residing on a computer-readable medium, for dynamically managing latency in a real-time electronic communication in a manner corresponding to that of claim 1, and independent claim 21 recites a computer system running programmed processes for doing the same. Accordingly, for the reasons noted above with respect to claim 1, Applicant requests withdrawal of the rejection of claims 11 and 21, along with claims 12-13, 15-16, 18-20, 22-23, 25-26 and 28-30 that depend therefrom.

Claims 4, 14 and 24

Claims 4, 14 and 24 are rejected under 35 U.S.C. § 103 as being unpatentable over Hodson in view of the Examiner's official notice. Applicant requests reconsideration and withdrawal of the rejection of claims 4, 14 and 24 because the Examiner's official notice does

not remedy the failure of Hodson to describe or suggest the subject matter of independent claims 1, 11 and 21 from which claims 4, 14 and 24 respectively depend.

The Examiner has taken official notice that “averaging of measurements [of instantaneous communication delays associated with a receiving data buffer] is well known in the art.” See Office action of October 13, 2005 at page 5, ¶¶ 17-18. The official notice, however, does not remedy the failure of Hodson to describe or suggest determining a range for a size of the communication delay based on a measured communication delay that arises from a receiving data buffer, as recited in the independent claims. Nor does the Office Action contend the official notice does so. For at least this reason, and based on the dependency from independent claims 1, 11 and 21, Applicant respectfully requests withdrawal of the rejection of claims 4, 14 and 24.

Moreover, to the extent that this rejection is maintained, Applicant traverses the official notice taken, and requests evidentiary support demonstrating the contention that “averaging of measurements [of instantaneous communication delays associated with a receiving data buffer]” is well known in the art.

Conclusion

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

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Respectfully submitted,

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